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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,014	02/17/2005	Takashi Takeda	Q86052	5022
23373 7590 01/31/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER KOSLOW, CAROL M	
			ART UNIT 1755	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/31/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/525,014

Applicant(s)

TAKEDA ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/17/05</u> . | 6) <input type="checkbox"/> Other: ____. |

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The foreign references cited in the information disclosure statement filed 17 February 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are indefinite since the formulas, as written, do not match that of claim 2 from which they depend. The formulas in these claims should either be written so they match that of claim 2 or the claims should be rewritten as dependent on claim 1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 57-30782 or JP 59-193983.

These references teach metal oxide phosphor and the search report teaches these references teach claim 6 and thus the use of these phosphors in vacuum ultraviolet radiation exciting devices. The example on page 3 of JP 59-193983 teach the phosphor has the formula $(Y_{0.8999}Tb_{0.1}Dy_{0.0001})_2O_3 \cdot 0.2BaO \cdot SiO_2$ and the abstract and formula in JP 57-30872 teaches a silicate phosphors containing terbium, at least one of Zn Mg or Ca and at least one of Y, Gd and La. The references teach the claimed phosphor and device.

Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 21,536.

This reference teaches silicate phosphors and their use in low-pressure mercury vapor lamps, which are vacuum ultraviolet radiation exciting devices. The reference teaches these phosphors can have the formula $M_3(Ln_{2-x-r}Gd_rTb_x)Si_6O_{18}$, where M is Ca or Sr, Ln is Y, Gd or La, r is 0 to 2-x and x is 0.01-0.8. This formula falls within that claimed. The reference teaches the claimed phosphors and device.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 4,215,289.

This reference teaches low-pressure mercury vapor lamps, which are vacuum ultraviolet radiation exciting devices, comprising silicate phosphors that contains barium or barium and strontium, yttrium, gadolinium, praseodymium and optionally samarium and dysprosium. The reference teaches the claimed phosphor and device.

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Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 4,810,930.

This reference teaches low-pressure mercury vapor lamps, which are vacuum ultraviolet radiation exciting devices, comprising silicate phosphors that contain barium, europium, gadolinium and optionally yttrium and germanium. The reference teaches the claimed phosphor and device.

Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent application publication 2001/0006228.

This reference teaches plasma display panels, which are vacuum ultraviolet radiation exciting devices, comprising silicate phosphors having the formula $\text{Ba}_2\text{Gd}_2(\text{Si}_{1-x}\text{Ge}_x)_4\text{O}_{13}:\text{Eu}_y$, where x is 0-1. This formula can be rewritten as $\text{Ba}_2(\text{Gd}_{2-y}\text{Eu}_y)\text{Si}_{1-x}\text{Ge}_x)_4\text{O}_{13}$, where x is 0-1 and $y>0$. The reference teaches the claimed phosphor and device.

Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

There is no teaching or suggestion in the cited art of record of phosphors having the claimed formulas.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
January 29, 2007



C. Melissa Koslow
Primary Examiner
Tech. Center 1700